



U.S. Department  
of Transportation

Research and  
Special Programs  
Administration

JUL 12 2000

400 Seventh Street, S.W.  
Washington, D.C. 20590

DOT-E 1862  
(NINTH REVISION)

EXPIRATION DATE: April 30, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Greer Hydraulics, Incorporated  
Rockford, IL  
  
(See Appendix A for a list of additional grantees)
2. PURPOSE AND LIMITATION:
  - a. This exemption authorizes the transportation in commerce of certain non-DOT specification hydraulic accumulators containing compressed nitrogen. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.
  - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.302(a)(1), and 175.3 in that the prescribed packagings are not authorized except as provided herein.
5. BASIS: This exemption is based on the application of Greer Hydraulics, Inc. dated May 25, 2000, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Accumulators, pressurized, pneumatic or hydraulic (containing non-flammable gas)	2.2	NA1956	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a steel hydraulic accumulator conforming with drawings on file with the Office of Hazardous Materials Exemptions and Approvals and complying with the following:

(1) SurgeKushon: A welded accumulator having a capacity of not over 120 gallons, a design pressure not exceeding 500 psig, and designed and fabricated in full compliance with Section VIII of the ASME Code; or

(2) Diaphragm: a welded accumulator having a capacity of not over 1 gallon, a design pressure not exceeding 3,600 psig, and a 4 to 1 burst to design pressure ratio; or

(3) Bladder Accumulator: A seamless accumulator having a capacity of not over 40 gallons, a design pressure not over 5,000 psig, and a 4 to 1 burst to design pressure ratio; or

(4) Piston Accumulator: A seamless accumulator having a capacity not over 50 gallons, a design pressure not exceeding 5,000 psig, and a 4 to 1 burst to design pressure ratio; or

(5) Greerolators: A welded accumulator having a capacity of not over 1 gallon, a design pressure not exceeding 2,000 psig, and a 4 to 1 burst to design pressure ratio.

b. Each accumulator must be constructed to relieve pressure without bursting in a fire or must be equipped with a pressure relief device as required in § 173.34(d).

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c. TESTING - Accumulators must be tested without evidence of failure or damage, to at least 1 ½ times the design pressure prior to each refill and reshipment.

d. OPERATIONAL CONTROLS -

(1) The charged pressure of each accumulator at 70°F for shipment must not exceed 70 percent of the design pressure.

(2) Each accumulator must be shipped in strong outside packaging in accordance with § 173.301(k). Each outside packaging must be marked "DOT-E 1862" and "NITROGEN-HYDRAULIC ACCUMULATORS".

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, and cargo aircraft only.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or aircraft used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.


- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

  
for Robert A. McGuire  
Acting Associate Administrator for  
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.  
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

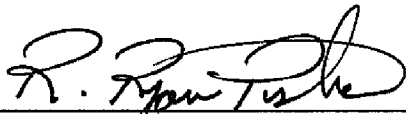
Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: CWFREEMAN/alb

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The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Bosch Automation Technology Racine, WI	5/5/2000	5/12/2000	4/30/2002
Parker Hannifin Corporation Rockford, IL	5/25/2000	JUL 12 2000	4/30/2002
R & M Energy Systems Willis, TX	1/21/2000	3/15/2000	7/31/2000



*for* Robert A. McGuire  
Acting Associate Administrator for  
Hazardous Materials Safety